

## LED MOVING HEAD SERIES



### iShow 3108 RGBW USER'S MANUAL

**THANK-YOU**

First of all, we thank you for having chosen our LED moving head iShow 3108 RGBW. This device is a great and reliable unit that can meet most of your requirements for professional markets. It has been thoroughly tested and shipped in perfect condition. It can be just plug-and-play, and also can be controlled via standard DMX512 for sophisticated requirements.

All of our products are made on our business philosophy:

- we believe that satisfied customers are the key to a successful business and that controlled growth is the only path to sustained profitability.
- We believe that there is no point in supplying products that are substandard or inadequate. In the long run, it never pays

You can always rely on us.

Thanks again!

W&T team

**CATALOG**


Warning	4
Safety instructions	4
Rigging	6
Product Overview	7
Setup and Operation	8
Power Supply	8
LCD Display Setup	8
Fixture Installation	10
DMX Cable Requirements	11
Operating Modes	11
Stand Alone Mode	12
Master/Slave Mode	12
DMX Mode	12
Cabling the fixtures	13
DMX Terminator	13
DMX Start Address Setup	13
DMX Channel Chart	14
Maintenance	15
Trouble-shooting	16
Claims	16
Specifications	17

## WARNING

### Safety Instructions:



This product guide contains important information about the safe installation and use of this projector. Please read and follow these instructions carefully and keep this manual in a safe place for future reference.

When unpacking and before disposing of the carton, check there is no transportation damage before using the projector. Should there be any damage caused by transportation, consult your dealer and do not use the apparatus.

The projector is for indoor use only. Use only in dry locations. Keep this device away from rain and moisture, excessive heat, humidity and dust. Do not allow contact with water or any other liquids. The projector is not designed or intended to be mounted directly on to inflammable surfaces. 

The projector is only intended for installation, operation and maintenance by qualified personnel.

The projector must be installed in a location with adequate ventilation, at least 50cm from adjacent wall surfaces. Be sure that no ventilation slots are blocked.

Do not project the beam onto inflammable surfaces, minimum distance is 5m.  5m 

Do not attempt to dismantle and/or modify the projector in any way.

Electrical connection must only be carried out by qualified personnel.

Before installation, ensure that the voltage and frequency of power supply match the power requirements of the projector.

It is essential that each projector is correctly earthed and that electrical installation conforms to all relevant standards.

Do not connect this device to any other types of dimmer apparatus.

Make sure that the power-cord is never crimped or damaged by sharp edges. Never let the power-cord come into contact with other cables. Only handle the power-cord by the plug. Never pull out the plug by tugging the power-cord.

The projector should always be installed with a secondary safety fixing. A safety cord is supplied for this; it should be attached as shown in "installing the projector" section.

There is no user serviceable parts inside the projector do not open the housing and never operate the projector with the covers removed.

This device is not designed for permanent operation. Consistent operation breaks will ensure that the device will serve you for a long time without defects.

The maximum ambient temperature  $t_a = 45^{\circ}\text{C}$  must never exceeded.

The relative humidity must not exceed 50% with an ambient temperature of  $45^{\circ}\text{C}$ .

If this device is operated in any other way other than the one said in this manual, this device may suffer damages and thus the warranty becomes void.

**Always disconnect from the mains, when the device is not in use or before cleaning it or before attempting any maintenance work.**

If you have any questions, don't hesitate to consult your dealer.

### IMPORTANT:

**The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the device.**

### CAUTION! EYE DAMAGES!

Avoid looking directly into the light source,  
Meant especially for epileptics!

**PLEASE recycle the shipping carton whenever possible.**

## Rigging

Concerning rigging, trussing for this device, please follow the European and national guidelines.


Only the qualified technicians are allowed for the device installation,

The device must never be mounted for a possible swinging position, and a safety cord attached must always be used.

## IMPORTANT:

**Improper installation can lead to serious damage to people and property.**

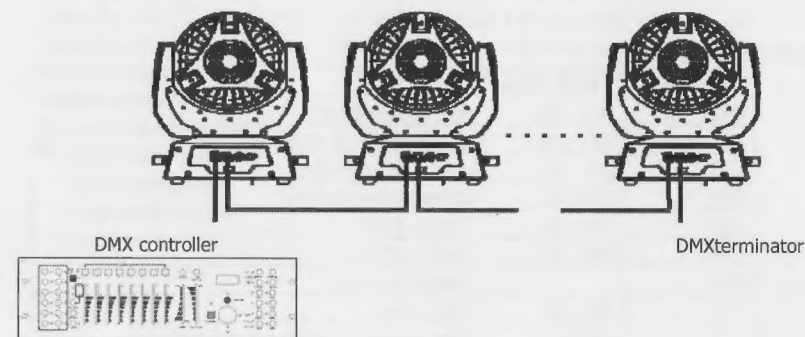
This device is not supplied with a plug, and it has an open power cable. So when connecting the device to the mains with a power plug, ensure that the right color cable is connected to the right place. The following table is for your reference.

International	EU Cable	The U.K. Cable	US Cable	Pin
L	Brown	Red	Yellow/ Copper	Fase
N	Blue	Black	Silver	Nul
	Yellow/Green	Green	Green	Earth

## IMPORTANT

**Please ensure that the device is always connected to the earth properly.**

## Cabling the Fixtures

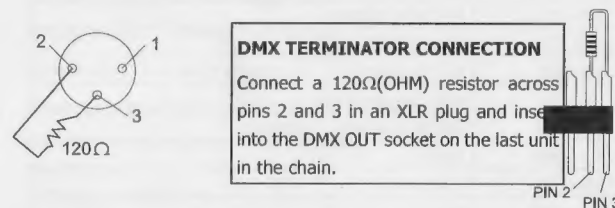


## DMX Terminator

In DMX Controller mode, at the last fixture in the chain, the DMX output has to be connected with a DMX terminator. This prevents electrical noise from disturbing and corrupting the DMX control signals.

The DMX terminator is simply an XLR connector with a 90 - 120Ω (ohm) 1/4 watt resistor connected across pins 2 and 3 of a male XLR connector (DATA+ and DATA-). This terminator is then plugged into the output socket on the last fixture in the daisy chain to terminate the line. Using a cable terminator will decrease the possibilities of erratic behavior.

The connections are illustrated below.



## DMX Start Address Setup

Each fixture must be given a DMX star address so that the correct projector responds to the correct control signals. This DMX address is the channel number from which the projector starts to "listen" to the digital control information being sent out from the controller.

This fixture has 9 DMX channels. To set up DMX starting address for the fixtures, press <ENTER>, and the

LED display will show DMX control mode. Press <UP> or <DOWN> to set up the fixture start address.

When DMX start address is set up, press <ENTER> to save the setup.

### DMX Channel Chart

Channel	DMX value	Function
CH1	000 - 255	Red dimmer 0-100%
CH2	000 - 255	Green dimmer 0-100%
CH3	000 - 255	Blue dimmer 0-100%
CH4	000-255	White dimmer 0-100%
CH5	000 - 255	Pan 0 - 630°
CH6	000 - 255	Tilt 0 - 270°
CH7		Speed Scanning
	000 - 225	Fast to slow
	226 - 235	blackout during pan/tilt movement
	236 - 255	Natural speed(fast)
CH8		Strobe
	000 - 009	No strobe function
	010 - 149	Strobe
	150 - 199	Fast in slow out
	200 - 249	Slow in fast out
	250 - 255	No strobe function
CH9	000 - 255	Dimmer 0-100%
CH10	000-004	Rainbow
	005 - 031	R(↑)G(0)B(0)
	032 - 063	R(↓)G(↑)B(0)
	064 - 095	R(↑)G(255)B(0)
	096 - 127	R(↓)G(↓)B(↑)
	128 - 159	R(↑)G(0)B(255)
	160 - 191	R(↓)G(↑)B(255)
	192 - 223	R(↑)G(255)B(255)
	224 - 255	R(↓)G(↓)B(↓)
		Auto program reset
CH11	000 - 049	RGBW dimmer in operation
	050 - 059	Red
	060 - 069	Green
	070 - 079	Blue
	080 - 089	Yellow
	090 - 099	Cyan
	100 - 109	Purple
	110 - 119	White
	120 - 129	Color temperature 3,200°K
	130 - 139	Color temperature 5,600°K
	140 - 149	Color temperature 6,500°K
	150 - 159	Color temperature 8,500°K

└Light White:000 White dimmer  
└Light Strobe:000 Strobe adjustment  
└Scan Pan:128 Pan -movement with 8 Bit-resolution  
└Scan Tilt:128 Tilt -movement with 8 Bit-resolution  
└Scan PanFine:000 Pan -movement with 16 Bit-resolution  
└ScanTiltFine:000 Tilt -movement with 16 Bit-resolution  
└Light Calibrate

└Cal Red:-15~+16  
└Cal Green:-15~+16  
└Cal Blue:-15~+16  
└Cal White:-15~+16  
└Cal Pan:-128~+127  
└Cal Tilt:-128~+127

**Red** \_\_ Static red

**Green** \_\_ Static green

**Blue** \_\_ Static blue

**Yellow** \_\_ Static yellow

**Cyan** \_\_ Static cyan

**PureWhite** \_\_ Static Pure White

**White** \_\_ Static white

**White** \_\_ Static white

**3200K** \_\_ 3200K color temperature

**5600K** \_\_ 5600K color temperature

**6500K** \_\_ 6500K color temperature

**8500K** \_\_ 8500K color temperature

**10000K** \_\_ 10000K color temperature

**ChangeColor** \_\_ Changelcolor program

**Twinkling** \_\_ Twinkling program

**Fade** \_\_ Fade program

**Macro** \_\_ Auto program , enter can edit it

Macro Menu:

└Step Quantity:62

└Program Step 01

| └ChangeColor

| └Twinkling

| └Fade

| .....

└Program Step 62

## 2. SET Menu

### SET Menu:

- Reset Machine
  - Reset: ON
  - Reset: OFF
- Load Parameter
  - Load ON
  - Load OFF
- Master / Alone
  - Master Mode
  - Alone Mode
- Auto / Sound
  - Auto Mode
  - Sound Mode
- MIC Sense: 00~99%
- TC Switch
  - TC Switch Mask
    - Switch Mask ON
    - Switch Mask OFF
  - TC Switch Temp
    - TC Temp Cap
      - TC Temp Cap: Yes
      - TC Temp Cap: No
    - TC Temp Set
- Scan Setting
  - Reverse Pan
    - Reverse Pan : ON
    - Reverse Pan : OFF
  - Reverse Tilt
    - Reverse Tilt: ON
    - Reverse Tilt: OFF
  - Scan 16 Bit
    - Scan 16 Bit: ON
    - Scan 16 Bit: OFF
  - Pan Degree
    - Pan Degree: 630
    - Pan Degree: 540
  - Scan BlackOut
    - ScanBlackOut: ON
    - ScanBlackOut: OFF
  - Feed Back
    - Feed Back: ON
    - Feed Back: OFF
- Information
  - Time: tt/mm/ss
  - Date: mm/dd/yy

MIC sensitivity adjusting  
Reduce output if over temperature

(Pass-word protected, common user taboo)  
TC Temperature Capture

TC Temperature set

16 bit resolution

630°  
540°  
Blackout during pan/tilt movement

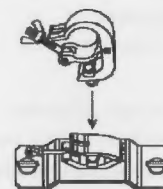
Return the head to the correct starting position after  
changing the position

Information consultation

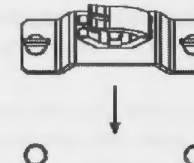
## Fixture Installation

When suspending the fixture above ground level, verify that the structure can hold at least 10 times the weight of all installed devices.

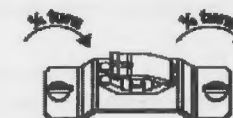
Verify that all external covers and rigging hardware are securely fastened and use an approved means of secondary attachment such as a safety cable.



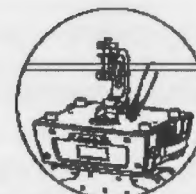
Screw clamp onto the  
Omega-holder



Insert quick lock fasteners into  
the installation holes



Tighten quick-lock fasteners fully  
clockwise .



Use safety-cord for stronger protection

## DMX Cable Requirements:

The LED moving head iShow 3108 RGBW wash can be controlled via standard DMX-512 protocol. This unit has 12 DMX channels which can be set up on LCD panel. You need to use a standard 3-pin XLR connector for data input and output.



To ensure proper DMX data transmission, when using several DMX units try to use the shortest cable path. The order in which units are connected in a DMX chain does not influence the DMX addressing. For example; a unit assigned a DMX address as 1 may be placed anywhere in a DMX line, at the beginning, or at the end, or anywhere in the middle. When a unit is assigned a DMX address as 1, the DMX controller understands to send DATA assigned to address 1 to that unit, no matter where it is positioned in the DMX chain.

## Operating Modes

iShow 3108 RGBW wash can work in the following modes:

- DMX control mode: this function will allow you to control individual unit traits with a standard DMX 512 controller.
- Master/Slave mode: one unit will work as the Master in one of the above three modes, other units in the chain will work in synchronization with the Master unit.



- Stand Alone mode: at this operation mode, the fixture will run the preset programs.
- Sound-Activated mode: the unit will respond to sound, chasing through the built-in programs.

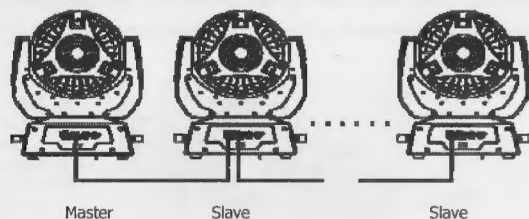
### Stand Alone Mode

Following up the "LCD Display Setup" to set up Stand Alone mode. The fixture will run built-in programs.

### Master/slave connection

This function allows you to link fixtures together to run in a Master/Slave mode. In Master/Slave operation, one fixture will act as the controlling fixture and the rest will react to the controlling fixtures' built-in programs. Any fixture can act as a Master or as a Slave; however, only one fixture can be programmed to act as the "Master".

Daisy chains your fixtures via the XLR connector on the rear of the fixture. Remember that the Male XLR connector is the input and the Female XLR connector is the output. The first fixture in the chain (Master) will use the female XLR connector only. The last fixture in the chain will use the male XLR connector only. The fixture in the chain must be the same fixtures, DO NOT mix fixtures.



### DMX mode

Operating through a DMX controller give the user the freedom to create their own programs tailored to their own individual needs.

1. This function will allow you to control each individual unit with a standard DMX 512 controller.
2. This device has 12 DMX channels. Please refer to below for DMX channel details.
3. To run the unit in DMX mode, plug in the unit via the XLR connector to any standard DMX controller. To set up DMX address, please refer to the instructions in "LCD Display Setup Menu".

### PRODUCT OVERVIEW

iShow 3108 RGBW wash is equipped with 108 pieces ultra-bright 3w LED lamps. It can produce extremely high light output. This fixture can create excellent color mixing with high even and uniform distribution of brightness and light output.

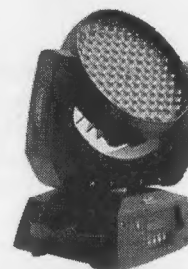
iShow 3108 RGBW wash comes with preset programs which can be triggered at sound activated mode. It can also produce seamless dimming, fast strobe (1-20FPS). Other features includes 540° Pan (16 bit) and 270° Tilt (16 bit), quiet operation, preset color micros, color temperature adjustable, overheat protection, compact modular design.

This fixture has multiple control modes. It can be controlled with any standard DMX 512 consoles. It is equipped with 3-pin XRL DMX ports. With the built-in pre-programs, it can also run at master/slave mode. For easier control, just run it with sounds around you.

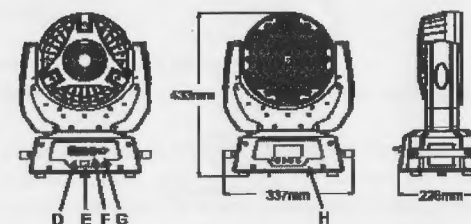
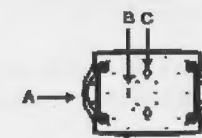
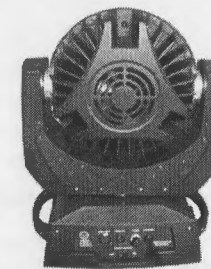
iShow 3108 RGBW wash is highly compact. It can be installed in almost any indoor place at any orientations. Its LED display can flip 180 degrees when it is mounted up side down.

iShow 3108 RGBW wash is an ideal tool for many applications: night clubs, bars, shops, cruise ships, KTV rooms, restaurants, demo rooms etc...

Front view



Back view



- A. Carrying handle
- B. Safety cable hole
- C. Installation holes
- D. DMX IN socket/ DMX OUT socket
- E. Power switch
- F. Fuseholder
- G. Power supply
- H. Control panel

## SETUP AND OPERATION

### Power Supply

Before plugging the units in, make sure that the source voltage in your area matches the required voltage for your units. You should be sure that your unit voltage matches the wall outlet voltage before attempting to operate your units.

### LCD Display Setup

There are four touch buttons under the LCD display: ESC, UP, DOWN and ENTER. Please follow up the following instructions to set up your fixtures.

#### 1. Menu navigation

**A001**(with actually stored address) \_\_ DMX mode

Press ENTER enter to the submenu

DMX Menu:

- └DMX Address: 001                      Set the DMX address
- └No DMX Signal                      Run if there is no DMX signal
- └Stop Run
- └Hold Run
- └Auto Run
- └Sound Run

#### ManualDimmer

ManualDimmer:

- └Light Switch
- | └Light ON
- | └Light OFF
- └Light Red:000                      Red dimmer
- └Light Green:000                      Green dimmer
- └Light Blue:000                      Blue dimmer
- └PureWhite:000                      PureWhite dimmer

	160 - 169	Color temperature 10,000°K
	170 - 174	Color changing (Motors rotate automatically)
	175 -179	Color changing (Motors rotate by DMX control)
	180 - 184	Twinkling (Motors rotate automatically)
	185 -189	Twinkling (Motors rotate by DMX control)
	190 - 194	Color fading (Motors rotate automatically)
	195 - 199	Color fading (Motors rotate by DMX control)
	200 - 219	Void
	220 - 229	Reset
	230 - 234	Color macro (Motors rotate automatically)
	235 - 239	Color macro (Motors rotate by DMX control)
	240 - 244	Sound activated (Motors rotate automatically)
	245 - 249	Sound activated (Motors rotate by DMX control)
	250 -255	Void
CH12	000 - 255	Pan fine
CH13	000 - 255	Tilt fine

## MAINTENANCE

To maintain optimum performance and minimize wear fixtures should be cleaned frequently. Usage and environment are contributing factors in determining frequency. As a general rule, fixtures should be cleaned at least twice a month. Dust build up reduces light output performance and can cause overheating. This can lead to reduced lamp life and increased mechanical wear. Be sure to power off fixture before conduction maintenance.

Unplug fixture from the mains. Use a vacuum or air compressor and a soft brush to remove dust collected on external vents and internal components. Clean all glass when the fixture is cold with a mild solution of glass cleaner and a soft lint free cotton cloth or lens tissue. Apply solution to the cloth or tissue and drag dirt and grime to the outside of the lens. Gently polish optical surfaces until they are free of haze and lint.

The operator has to make sure that the safety-related and machine-technical installations are to be inspected by an expert after every four years in the course of an acceptance test.

The operator has to make sure that safety-related and machine-technical installations are to be inspected by a skilled person once a year.

The following points have to be considered during the inspection:

3. All screws used for installing the device or parts of the device have to be tightly connected and must not be corroded.
4. There may not be any deformations on housings, fixations and installation spots.
5. Mechanically moving parts like axles, eyes and others may not show any traces of wearing.
6. The electric power supply cables must not show any damages or material fatigue.



1. Make sure connections are clean and totally dry before linking equipments or supplying electric power.
2. Due to fog residue, smoke and dust, cleaning the internal and external optical lenses must be carried out periodically to optimize light output. You should keep the device clean, otherwise, this device will lose its light output. Disconnect the mains power supply, and then wipe the cover with a damp cloth. Do not immerse in liquid, Wipe lens clean with glass cleaner and a soft cloth. Do not use alcohol or solvents.

## TROUBLE SHOOTING

This troubleshooting guide is just to help you to solve simple problems. Should problems not been solved by the following solutions, DO NOT open the unit, as this may damage the unit and the warranty will become void. The correct way is to consult the dealer, or return the unit to them.

The common problems that users may encounter while using this unit are listed below with solutions:

Problems	Solutions
Unit does not respond to DMX control	Check if the DMX cables are connected properly, and if the DMX cables are wired correctly. Also check if all cables are connected to the right connectors.
No light	<ol style="list-style-type: none"> <li>1. Check if the unit is plugged into a appropriate power supply;</li> <li>2. Return the unit to the dealer.</li> </ol>
Unit does not respond to sound	<ol style="list-style-type: none"> <li>1. Quiet or high pitched sounds will not activate the unit. If problems are not resolved, contact your dealer for service.</li> </ol>

## CLAIMS

Damage incurred in shipping is the responsibility of the shipper; therefore the damage must be reported to the carrier upon receipt of merchandise. It is the customer's responsibility to notify and submit claims with the shipper in the event that a fixture is damaged due to shipping. Any other claim for items such as missing components/part, damage not related to shipping, and concealed damage, must be made within seven days of receiving merchandise.

## SPECIFICATIONS

### Electrical

Power supply	90~260V AC, 50/60Hz
Power consumption	410W
LED lamp drive current	700mA

### Photometric data

Light source	108 pcs 3W RGBW LED lamps, 28R 287G 28B 24W
LED lamp rated life	10,000 hours
Beam angle	25°, (15°, 30°, 40°, 60° optional)

### Dynamic effects

Color changing effects	Fabulous color mixing with highly even and uniform distribution of brightness and light output.
Strobe	variable electronic strobe 0~25F.P.S
Dimmer	Variable electronic dimmer 0 -100%
Pan	540° or 630o (8/16 bit movement resolution), automatic self-correction.
Tilt	270° ( 8/16 bit movement resolution), automatic self-correction.
Other features	electronic strobe with pulse effects

### Control and programming

DMX channels	13 channels
Setting and addressing	Control panel with LED display
Other operation modes	Master/Slave mode; Sound Activated mode
Preset program	Built-in macro colors can be triggered via DMX channel

### Construction

Color	Black
Housing	ABS
IP rating	IP20

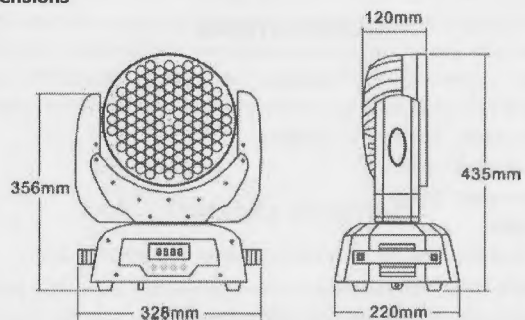
### Thermal

Working temperature	-20° C ~ +55° C
Ambient humidity	10% ~ 90%
Thermalstat	built-in thermalstat for overheating protection

### Physical

Fixture dimensions	328 x 356 x 220 mm
net weight	10.0 kg
Gross weight	12.0 kg

### Dimensions



**NOTE:** Due to improvement, the product specifications and this manual are subject to change without prior notice

**MEMO:**

Blank lined paper with horizontal ruling lines.

## LED MOVING HEAD SEIRES

### iShow 3108 RGBW USER'S MANUAL



**W&T International Ltd.**

4-2-602, 2<sup>nd</sup> Street E.  
Aoyuan, 9 Shiliang Road  
Panyu 511400 Guangzhou  
China

T: +86-20-3473 0202

F: +86-20 3473 6151

[Http://www.wtintl.net](http://www.wtintl.net)

E-mail: [wt@wtintl.net](mailto:wt@wtintl.net)